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PATENT & TRADEMARK OFFICE

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Patent Application of: )
Gunnar D. Danneels, et al. )
)
Serial No.: 09/447,912 ) Art Unit: 3621
Filed: November 23, 1999 )
) Examiner: James A. Reagan
For: Method for Securely Passing A )
Value Token Between Web Sites )

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BOARD OF PATENT APPEALS
AND INTERFERENCES

Assistant Commissioner for Patents
Washington, D.C. 20231

APPEAL BRIEF
IN SUPPORT OF APPELLANTS' APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Sir:

Applicants (hereafter "Appellants") hereby submit this Brief in triplicate in support of their Appeal from a final decision by the Examiner in the above-captioned case. Appellant respectfully requests consideration of this Appeal by the Board of Patent Appeals and Interferences for allowance of the claims in the above-captioned patent application.

An oral hearing is not desired.

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:
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WASHINGTON, D.C. 20231, ON: 17 JANUARY 2003
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INTEL CORPORATION
Name of Assignee

[signature]
SIGNATURE

1/17/2003
DATE

## I. REAL PARTY IN INTEREST

The invention is assigned to Intel Corporation of 2200 Mission College Boulevard, Santa Clara, California 95052.

## II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

## III. STATUS OF THE CLAIMS

Claims 27-48 are pending in the above-referenced patent application. Claims 27-48 were rejected in the Final Office Action mailed on December 4, 2002. Claims 27-48 are the subject of this appeal.

## IV. STATUS OF AMENDMENTS

An amendment after final was filed on January 7, 2003, in order to put claim 27 in better form for appeal. This amendment was entered according to the Advisory Action mailed January 10, 2003.

A copy of all claims on appeal (claims 27-48) is attached hereto as Appendix A.

## V. SUMMARY OF THE INVENTION

Embodiments of the present invention are a system and method whereby a value token may be securely passed between affiliated web sites in an electronic commerce system so that a user may gain the benefit of a promotional discount or special offer from at least one of the affiliated web sites. The present invention establishes a sufficient level of trust between the member's web browser, a club manager and the affiliate web site in order to establish the user's membership in a jointly marketed club, that the affiliate is a trusted partner in the club, and that the user may receive a benefit without disclosing his or her identity. With the present

invention, the club manager does not need to know the identity of the club member desiring the benefit. This enables anonymous web-based cross company marketing programs. The present invention is simpler than prior art systems having multiple merchant and banking entities in that it involves only two entities, the club manager and an affiliate, who cooperate to offer the benefit without explicit arrangement by the club member. Embodiments of the present invention allow potentially valuable benefits to be given anonymously to club members with protection against fraud, the ability to recover in light of incomplete transactions, and the ability to bill back to the club manager in a trackable fashion. In addition, the invention minimizes the complexity of the electronic commerce system and the transfer of a user's personal information between web sites. The present invention provides for a benefit provision by using existing World Wide Web (WWW) mechanisms and features, without the need for an electronic wallet or electronic coupon applet to be used.

Figure 1 shows an electronic commerce system according to an embodiment of the present invention. A user or member PC 10 executes a well-known web browser program 12 to interact with a network 14, such as the Internet or other computer network. The member PC interacts with one or more server computer systems such as server 1 16 and server 2 18. A club manager 20 comprises an entity for managing a club or other group of members. In one embodiment, the club manager comprises a web site (e.g., a collection of web pages and associated computer programs). The club manager includes various features and functions, some of which are shown here as registration 24, credential storage 26, and credential creation 28.

The electronic commerce system includes at least one affiliate. At least one affiliate 30 comprises an entity for providing discounts, goods, services, promotional items, or anything of value to members of a group or club. In one embodiment, the affiliate is a web site coupled to the network by Server 2 18. The club manager and the affiliate may or may not be owned, associated with, or otherwise controlled by the same persons or companies. The affiliate interacts with the member's web browser via server 2 18 and network 14 and with club manager 20 via server 2 and the network. In any given system, there may be any number of affiliates for each club, with one club manager for the club. Any number of members may join the club and interact with one or more affiliates for obtaining discounts or other promotions. Members may join the clubs either before or after any given affiliate becomes involved with the club. Each affiliate includes various features and functions, some of which are shown here as credential verification 34, benefit provision 35, and error handling 36. An affiliate may also

comprise a credential database 37 for storing credentials for which a transaction has been completed.

A user may want to obtain a benefit from an affiliate that is available to the user because the user is a member of a club. In addition, the user would like to be able to obtain the benefit in a simple way. The benefit given to the club member by the affiliate may be anything of value, such as a prize, a product discount, a service discount, free goods, free services, or access to content, goods, or services not available to the general public, etc. The user may also want to be an anonymous member of the club. That is, the user may want to obtain the benefits of club membership without the club manager knowing any personal information about the user.

Figures 2 and 3 illustrate how the club manager, affiliate, and member interact according to an embodiment of the present invention. At block 100, a user uses his or her web browser to visit a web site that may be used for registration in a club. The club comprises a group of users according to any criteria as determined by the club manager. In one embodiment, the club registration web site is the club manager web site. The user registers with the club and becomes a member.

Once the user becomes a member, the user may subsequently visit the club web site at block 101. In case of either a new member's visit at block 100 or an existing member's visit at block 101, the club manager next authenticates the user and offers a benefit to the user. In one embodiment, offering of the benefit may be implemented as part of a *link to an affiliated web site* at block 102. If the member has not used the benefit before at block 104, the club manager generates a new value token associating the member with desiring to take advantage of a particular value proposition or benefit at block 106. This processing may be performed, at least in part, by credential creation function 28 of the club manager. The mapping between the member, entitlement to the benefit, and the value token may be retained by credential storage function 26 in the club manager. In one embodiment, the new value token associated with the member may be cryptographically signed (e.g., by using a private key of an asymmetric key pair and known public key cryptographic methods). Once the value token has been signed, it may be considered to be a credential for enabling access to the benefit by the member at the affiliate web site.

Generally, the value token may be any block of data. In various embodiments it may comprise a membership number or identifier, a random number, a billing number, personal information about the user, a user-selected password, or other data. In one embodiment, the

value token comprises a randomly selected transaction identifier associating the member with the current benefit but one that does not identify any characteristics or information about the member. The value token may also comprise time stamp information. The generated credential including the value token is specific to a particular affiliate, one of the affiliate's offers or benefits, and the club member. This allows the affiliate to verify the credential either in real-time during a tender of the credential by the member, or in batch mode with a group of credentials.

The club manager uses credential storage function 26 to store the credentials. Each member obtains a credential, but the club manager does not know if the member actually used it. If the benefit has been obtained before, the club manager uses the same value token for this member at block 108. At block 110, the club manager passes the signed value token to an affiliate web site as part of the uniform resource locator (URL) or in a form post to the affiliate web site. In one embodiment, this may be accomplished using a link of the well-known dynamic hyper text markup language (HTML). The passing of the token involves communicating data between the club manager and the affiliate over the network 14 and the servers 16, 18. In one embodiment, the value token may be passed as an HTML link or form such that no direct communication between the club manager and the club affiliate is required. This provides an advantage over known digital cash systems. The value token may be passed between the servers handling the club manager's web site and the club affiliate's web site indirectly and in one piece by using the member's web browser.

At block 112, the affiliate verifies the cryptographic signature of the value token received from the club manager using the club manager's public key. When the affiliate joins the marketing program, the affiliate obtains the club manager's public key of the private key/public key pair used to sign the value token. This key may be used at the affiliate's web site to validate the value token. The affiliate checks the value token against a list of all previously used tokens to ensure that the same member has not already obtained the benefit (if a rule of only one redemption is being used). This processing may be performed, at least in part, by credential verification function 34 of the affiliate.

If the value token is verified as being a valid token from the club manager, the affiliate obtains information from the member to complete a transaction and initiates delivery of the benefit. In one embodiment, the member may be required to supply name and shipping address information to the affiliate so that the affiliate can arrange for the shipping of the item represented by the benefit to the member. For example, the benefit may be a free promotional

good (e.g., a poster, a photo, a record, etc.) and the good may be shipped to the member via a physical delivery method. This processing may be accomplished, at least in part, by benefit provision function 35.

If the transaction is completed at block 116, the affiliate registers the value token as used, and stores information for billing purposes. In one embodiment, this information may be stored in a credential database 37. Optionally, at block 118, the affiliate may bill the club manager for all value tokens that it provided a benefit for.

## VI. ISSUES PRESENTED

A. Whether claims 27-31, 33, 36-40, 42, 45-48 are unpatentable under 35 U.S.C. 103(a) as being obvious over Laor (US 6,076,069) in view of Gabber, et al. (US 5,961,593)(hereinafter Gabber).

B. Whether claims 32, 35, 41, and 44 are unpatentable under 35 U.S.C. 103(a) as being unpatentable over Laor and Gabber, in view of Barnett, et al. (US 6,321,208)(hereinafter Barnett).

C. Whether claims 34 and 43 are unpatentable under 35 U.S.C. 103(a) as being unpatentable over Laor and Gabber, in view of Eggleston, et al. (US 6,061,660)(hereinafter Eggleston).

## VII. GROUPING OF CLAIMS

For the purposes of this appeal:

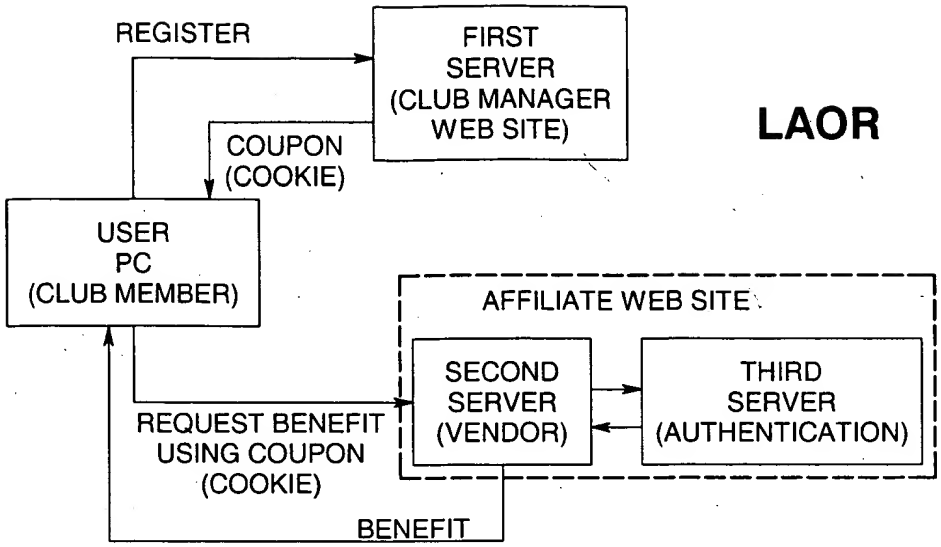
Claims 27-30 stand or fall together as Group I.

Claims 31-39 and 40-48 stand or fall together as Group II.

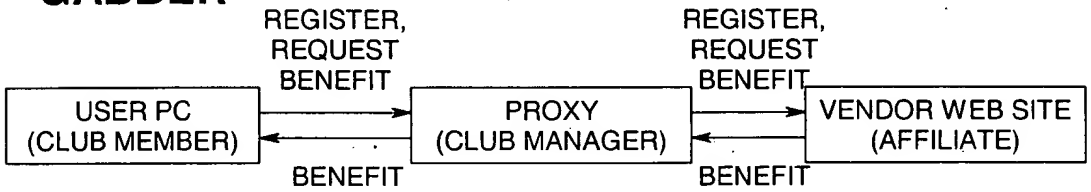
## VIII. ARGUMENT

**A. REJECTION OF CLAIMS 27-31, 33, 36-40, 42, AND 45-48 UNDER 35 U.S.C. § 103(a) UNDER LAOR IN VIEW OF GABBER IS IMPROPER. THE CITED ART DOES NOT TEACH OR SUGGEST THE CLAIM LIMITATIONS, TAKING THE CLAIM AS A WHOLE. A PRIMA FACIE CASE OF OBVIOUSNESS HAS NOT BEEN MADE.**

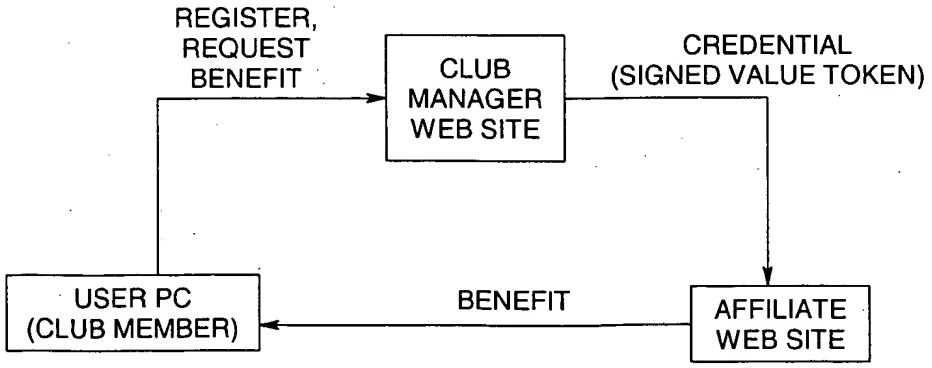
In discussing this rejection, the Applicants have determined that a figure comparing the architectures of the systems described by Laor, Gabber, and the present specification may be instructive for identifying the fundamental differences between the cited art and the present invention. The Board is directed to the figure shown below.




## GABBER




## PRESENT INVENTION




In the system taught by Laor, the user (i.e., club member) operates his or her PC to communicate with a web site run by a first server. The user registers with the first server and receives a coupon in the form of a cookie in return. This cookie is stored on the user's PC. The first server may be thought of as analogous to the claimed club member web site. When

the user wishes to redeem the coupon, the user communicates with a web site run by a second server by making the request for a benefit. The second server interrogates the cookie stored on the user's PC, and communicates with a third server to authenticate the cookie's data. The second and third servers may be thought of collectively as analogous to the claimed affiliate web site. If the coupon is valid (as determined by interrogating and authenticating the cookie), then the user receives the benefit. Note that the use of the cookie is instrumental in making this system work, and that the system is invasive with regard to the integrity of the user's PC because the second server must read the cookie from the user's PC.

In the system taught by Gabber, anonymous web browsing is made possible by using a proxy. In Gabber's system, a cookie is not used. Instead, the user's PC (i.e., the club member) communicates with the proxy server to register with a club and request a benefit. The proxy server then communicates with a vendor web site to register the user and request the benefit. Since *the proxy is always in the middle of this communication*, the proxy may be programmed to forward to the vendor only information needed to obtain the benefit, without providing identification of the club member. In this system, the vendor web site may be thought of as analogous to the claimed affiliate web site and the proxy may be thought of as analogous to the claimed club manager web site. The requested benefit may be sent through the proxy back to the club member. Note that the club member cannot communicate directly with the vendor web site or server, since the proxy (i.e., the club manager) handles all communication with the club member.

In marked contrast to the systems of Laor and Gabber, the present invention operates in a fundamentally different manner as follows. The club member communicates with the club manager web site to register as a club member and to request a benefit (after viewing or otherwise receiving information about club benefits from the club manager). The club manager web site communicates directly with the affiliate web site by sending a credential to the affiliate, the credential including the value token associated with the club member. The affiliate web site authenticates the credential, and provides the benefit directly to the club member if the credential is valid.

Note that no cookies or other intrusive measures are used. Note also that the club member receives the benefit directly from the affiliate web site without having to communicate further with the club manager. No proxy servers or proxy web sites are used. Additionally, *the Applicants wish to point out that the limitations of claim 27 specifically require a particular arrangement of entities and communications paths.* There are three entities: 1) the club

manager web site, 2) the affiliate web site, and 3) the club member (i.e., user's PC and browser). The club member communicates with the club manager web site to register as a club member and to request a benefit. The club manager web site communicates with the affiliate web site to send the credential including the value token to the affiliate web site. The club member communicates with the affiliate web site to receive the benefit associated with the credential without further communication with the club manager. These recited limitations of separate elements and particular communications paths must be considered in assessing the patentability of the claim as a whole.

It is submitted that claim 27 as amended is not taught or suggested by the combination of Laor and Gabber. Neither Laor or Gabber, alone or in combination, teach or suggest the specific arrangement and interaction of the club manager web site, affiliate web site, and club member as described above and in the Specification, and as claimed in claim 27, taking into account all limitations and *looking at the claim as a whole.* Substituting the cookie system of Laor with the proxy system of Gabber (as asserted by the Examiner) would not result in the claimed invention because the claimed invention does not use a proxy as a club manager to be "in the middle" of all communication (i.e., a conduit) between a user/club member and an affiliate web site. The arrangement of entities as claimed in the present invention is fundamentally different than the teachings and suggestions of the cited art. The combination of the cited art would not result in the claimed invention. One of ordinary skill in the art at the time the invention was made would not make the present invention based on the teachings and suggestions of Laor and Gabber, because such a combination simply would not work. The Examiner's assertion of replacing Laor's cookie technique with Gabber's proxy server makes no sense in the configuration of the present invention. Further, it appears the Examiner has undertaken a piecemeal approach to constructing the obviousness rejection. This is impermissible and unsupported by case law. Therefore, a prima facie case of obviousness has not been made based on the cited art. Claim 27 is allowable as presented.

As to claim 28, it depends from allowable claim 27. Gabber's system does appear to allow for an anonymous club member. However, the way it does this is by using a proxy server as the club manager. The present invention does not use a proxy server, as discussed above. Hence, Gabber does not suggest claim 28. Since claim 28 depends from allowable claim 27, it is also allowable.

As to claims 29 and 30, they depend from allowable claim 27. Therefore, they are also allowable.

As to claim 31 and 40, these claims require that no further interaction between the club member and the club manager web site take place during the operation of providing the benefit to the club member by the affiliate web site. In contrast, Gabber teaches a proxy system where the club manager is a proxy server that serves as a conduit for all communications between the club member and the affiliate web site. As such, Gabber teaches away from this limitation of claims 31 and 40. Furthermore, the combination of Laor and Gabber would not produce a system that performs the recited steps by the appropriate entities in the recited order. Since Gabber teaches a proxy server and the present invention has no proxy server, the communication steps recited in claims 31 and 40 cannot be performed as claimed by a system composed of the teachings of Gabber and Laor. In addition, the argument presented above with respect to claim 27 is equally applicable to claims 31 and 40. The combination of Laor and Gabber does not teach or suggest the specific steps claimed. Instead, the Examiner has attempted to find disparate teachings and suggestions in the cited art in a piecemeal approach to find the present claim limitations. This has been done without taking the claim as a whole. Although some of the limitations may be found in the cited art, the combination of the cited art does not result in a working system meeting the claim as a whole. Since the combination of Laor and Gabber do not teach or suggest claims 31 and 40 (taken as a whole), these claims are allowable. Therefore, claims 31 and 40 are allowable as presented.

As to claims 33 and 42, since they depend from allowable independent claims 31 and 40, respectively, they are also allowable.

As to claims 36 and 45, since they depend from allowable independent claims 31 and 40, respectively, they are also allowable.

As to claims 37 and 46, they depend from allowable claim 31 and claim 40, respectively. Hence, claims 37 and 46 are also allowable.

In regard to claims 38 and 47, the claimed limitations are neither in the cited text of Gabber, nor found elsewhere in Gabber. Gabber teaches using an electronic form on a web page to obtain information from the user. This operation is performed by a single web site (e.g., the NY Times web site as shown in Gabber at col. 11, line 7). The form on the web page in Gabber does not teach or suggest anything about communicating signed value tokens between web sites. Instead, Gabber simply teaches using a form to obtain data from a user from a *single* web page. Gabber does not teach or suggest using a form post from a club manager web site to an affiliate web site to pass a signed value token. In addition, claims 38

and 47 depend from allowable claims 31 and 40. Claims 38 and 47 are allowable as presented.

As to claims 39 and 48, the cited text of Gabber merely describes displaying an HTML document in a browser (as is currently notoriously well known). Neither Gabber nor Laor, alone or in combination, teach the claimed limitation of passing a signed value token between a club manager web site to an affiliate web site in a DHTML link using the web browser of the club member. Merely mentioning web browsers and HTML is insufficient to teach or suggest the claimed limitation. The claim must be examined as a whole; the limitation is not found in the references because the references do not teach or suggest passing a signed value token between a club manager web site to an affiliate web site in a DHTML link using the web browser of the club member. In addition, claims 39 and 47 depend from allowable claims 31 and 40. Claims 39 and 48 are allowable as presented.

**B. REJECTION OF CLAIMS 32, 35, 41, AND 44 UNDER 35 U.S.C. § 103(a) UNDER LAOR AND GABBER IN VIEW OF BARNETT IS IMPROPER. THE CITED ART DOES NOT TEACH OR SUGGEST THE CLAIM LIMITATIONS, TAKING THE CLAIM AS A WHOLE. A PRIMA FACIE CASE OF OBVIOUSNESS HAS NOT BEEN MADE.**

As to claims 32 and 41, since they depend from allowable independent claims 31 and 40, respectively, they are also allowable.

As to claims 35 and 44, since they depend from allowable independent claims 31 and 40, respectively, they are also allowable.

**C. REJECTION OF CLAIMS 34 and 43 UNDER 35 U.S.C. § 103(a) UNDER LAOR AND GABBER IN VIEW OF EGGLESTON IS IMPROPER. THE CITED ART DOES NOT TEACH OR SUGGEST THE CLAIM LIMITATIONS, TAKING THE CLAIM AS A WHOLE. A PRIMA FACIE CASE OF OBVIOUSNESS HAS NOT BEEN MADE**

As to claims 34 and 43, since they depend from allowable independent claims 31 and 40, respectively, they are also allowable.

## IX. CONCLUSION

Appellant respectfully submits that all the pending claims in this patent application are patentable and request that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

This brief is submitted in triplicate, along with a check to cover the appeal fee for one other than a small entity as specified in 37 C.F.R. § 1.17(c). Please charge any shortages and credit any overcharges to Deposit Account No. 02-2666.

Respectfully submitted,

Date: 1/16/03

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## X. APPENDIX A: CLAIMS ON APPEAL

27. An electronic commerce system comprising:

a club manager web site to create a club, the club manager web site including a registration component to register users as club members, and a credential creation component to create a value token associating a selected club member with entitlement to a benefit and to cryptographically sign the value token to create a credential;

at least one affiliate web site communicating with the club manager web site to receive the credential directly from the club manager web site, the at least one affiliate web site including a credential verification component to verify the authenticity of the value token of the credential, and a benefit provision component to provide the benefit to the selected club member on demand if the value token is valid; and

at least one club member communicating with the club manager web site to register for the club and to request the benefit, and communicating with the at least one affiliate web site to receive the benefit from the at least one affiliate web site without further interaction between the at least one club member and the club manager.

28. The system of claim 27, wherein the club member is anonymous from the perspective of the club manager and the at least one affiliate.

29. The system of claim 27, wherein the club member comprises a user's personal computer and web browser.

30. The system of claim 27, wherein the value token comprises a randomly selected transaction identifier associating the club member with the benefit, but not identifying any characteristics of the club member.

31. A method of securely passing a value token representing entitlement to a benefit between web sites in an electronic commerce system comprising:

registering a user as a member of a club by a club manager web site;

authenticating the club member and offering the benefit to the club member in a link to an affiliated web site;

generating a value token associating the club member with entitlement to the benefit due to membership in the club;

cryptographically signing the value token;

communicating the signed value token from the club manager web site directly to the affiliated web site without storing the signed value token by the club member;

verifying, by the affiliated web site, that the signed value token is valid;

providing the benefit to the club member by the affiliated web site when the signed value token is valid without further interaction between the club member and the club manager web site.

32. The method of claim 31, further comprising registering the signed value token as used by the affiliated web site, thereby preventing the club member from subsequently obtaining the benefit.

33. The method of claim 31, wherein the club manager web site and the affiliated web site are operated by different entities.

34. The method of claim 31, further comprising billing the club member web site, by the affiliated web site, for the benefit delivered to the club member.

35. The method of claim 31, further comprising verifying, by the affiliated web site, that the value token has not been previously used by any club member.

36. The method of claim 31, wherein the value token comprises a randomly selected transaction identifier associating the club member with the benefit, but not identifying any characteristics of the club member.

37. The method of claim 31, wherein the value token is unique for a combination of the club member, the affiliated web site, and the benefit.

38. The method of claim 31, wherein communicating the signed value token from the club manager web site to the affiliated web site comprises passing the signed value token as part of a form post to the affiliated web site.

39. The method of claim 31, wherein communicating the signed value token from the club manager web site to the affiliated web site comprises passing the signed value token in a dynamic hyper text markup language (DHTML) link by using a web browser of the club member.

40. An article comprising: a machine accessible medium having a plurality of machine accessible instructions, wherein when the instructions are executed by at least one processor, the instructions securely pass a value token representing entitlement to a benefit between web sites in an electronic commerce system by

registering a user as a member of a club by a club manager web site;

authenticating the club member and offering the benefit to the club member in a link to an affiliated web site;

generating a value token associating the club member with entitlement to the benefit due to membership in the club;

cryptographically signing the value token;

communicating the signed value token from the club manager web site directly to the affiliated web site without storing the signed value token by the club member;

verifying, by the affiliated web site, that the signed value token is valid;

providing the benefit to the club member by the affiliated web site when the signed value token is valid without further interaction between the club member and the club manager web site.

41. The article of claim 40, further comprising instructions for registering the signed value token as used by the affiliated web site, thereby preventing the club member from subsequently obtaining the benefit.

42. The article of claim 40, wherein the club manager web site and the affiliated web site are operated by different entities.

43. The article of claim 40, further comprising instructions for billing the club member web site, by the affiliated web site, for the benefit delivered to the club member.

44. The article of claim 40, further comprising instructions for verifying, by the affiliated web site, that the value token has not been previously used by any club member.

45. The article of claim 40, wherein the value token comprises a randomly selected transaction identifier associating the club member with the benefit, but not identifying any characteristics of the club member.

46. The article of claim 40, wherein the value token is unique for a combination of the club member, the affiliated web site, and the benefit.

47. The article of claim 40, wherein instructions for communicating the signed value token from the club manager web site to the affiliated web site comprises instructions for passing the signed value token as part of a form post to the affiliated web site.

48. The article of claim 40, wherein instructions for communicating the signed value token from the club manager web site to the affiliated web site comprises instructions for passing the signed value token in a dynamic hyper text markup language (DHTML) link by using a web browser of the club member.